

DEPARTMENT OF TRANSPORTATION**DIVISION OF ENGINEERING SERVICES**

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch
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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 1.28**WELDING INSPECTION REPORT****Resident Engineer:**Siegenthaler, Peter**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-025932**Date Inspected:** 12-Aug-2011**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1530**Contractor:** American Bridge/Fluor Enterprises, a JV**Location:** Job Site

CWI Name:	John Pagliero		
Inspected CWI report:	Yes	No	N/A
Electrode to specification:	Yes	No	N/A
Qualified Welders:	Yes	No	N/A
Approved Drawings:	Yes	No	N/A

CWI Present:	Yes	No	
Rod Oven in Use:	Yes	No	N/A
Weld Procedures Followed:	Yes	No	N/A
Verified Joint Fit-up:	Yes	No	N/A
Approved WPS:	Yes	No	N/A
Delayed / Cancelled:	Yes	No	N/A

Bridge No: 34-0006**Component:** SAS Tower**Summary of Items Observed:**

Caltrans Office of Structural Material (OSM) Quality Assurance Inspector (QAI) Joselito Lizardo was present at the Self Anchored Suspension (SAS) job site as requested to perform observations on the welding of components for the San Francisco Oakland Bay Bridge (SFOBB) Project.

At Tower Base Elevation 13Meters, Electro Slag Welding (ESW) T-joint S-041 location 'S', QA randomly observed ABF/JV qualified welder Jeremy Dolman continuing to perform CJP groove welding repair on the top of the welded ESW due to ABF QC noted linear indications that propagated into the Tower skin plate. The top of the ESW weld joint is being repaired with approval through Repair Welding Request (RWR) # 201108-008. The welder was observed welding in the 2G (horizontal) position utilizing Shielded Metal Arc Welding (SMAW) with 1/8" diameter E7018H4R electrode implementing welding procedure ABF-WPS-D15-1000-Repairs. The weld repair was preheated to more than 300 degree Fahrenheit using propylene gas torch prior welding. During the shift, ABF QC John Pagliero was noted monitoring the welder. Measured welding parameter during welding was 110 amperes on a 1/8" diameter E7018H4R electrode. Before the end of the shift, 2G SMAW repair welding was completed and the welder started carbon air arc gouging the run off tab he used during welding.

At Tower Base Elevation 13Meters, Electro Slag Welding (ESW) T-joint N-041 location 'N', QA randomly observed ABF/JV qualified welder Richard Garcia continuing to perform CJP groove welding repair on the top of the welded ESW due to ABF QC noted linear indications that propagated into the Tower skin plate. The top of the ESW weld joint is being repaired with approval through Repair Welding Request (RWR) # 201108-011. The welder was observed welding in the 2G (horizontal) position utilizing Shielded Metal Arc Welding (SMAW) with 1/8" diameter E7018H4R electrode implementing welding procedure ABF-WPS-D15-1000-Repairs. The weld

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repair was preheated to more than 300 degree Fahrenheit using propylene gas torch prior welding. During the shift, ABF QC John Pagliero was noted monitoring the welder. Measured welding parameter during welding was 120 amperes on a 1/8" diameter E7018H4R electrode. At the end of the shift, 2G SMAW repair welding was completed. Smooth grinding/cleaning of the welded repair still outstanding.

At Tower Base Elevation 13Meters outer West shear plate, ABF foreman Rory Hogan and other ABF personnel were noted continuing to cut the top bevel to 45 degree and depth of 39mm as required. The personnel were noted using oxy-propylene gas torch in cutting the bevel. While other personnel were noted manually cutting the ends of the shear plate where the track mounted torch nozzle holder has limited access, other personnel were noted smooth grinding the cut bevel of the shear plate. The work was still in progress.

At the request of Quality Control Field Supervisor, Bonifacio Daquinag, QA has randomly verified the QC VT/MT of the ESW weld joints top repair and top one foot vertical weld. The VT/MT of the top portion of the ESW weld joints is being made as partial inspection in anticipation of limited access when the 13Meters diaphragm is installed. The QA verification was performed to verify that the welding and the VT/MT inspection performed by the QC inspector meet the requirements of the contract documents. At the conclusion of the QA verification, results were noted below;

ESW Weld Location Joint Type QA MT Remarks

'M' (W-042) T-joint MT Passed Top excavation repair and top one foot of vertical weld.

'A' (N-044) Butt-joint MT Failed Top six inches of vertical weld noted with overlap.



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Summary of Conversations:

No significant conversation occurred today.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact SMR Nina Choy 510-385-5910, who represents the Office of Structural Materials for your project.

Inspected By: Lizardo, Joselito

Quality Assurance Inspector

Reviewed By: Levell, Bill

QA Reviewer